

REMARKS

Claims 3, 8, and 9-11 remain in this application. Claims 1, 2, and 4-7 have been canceled.

All of the original **claims 1-7** have been rejected under 35 USC 103(a) as being unpatentable over the Argent reference (hereinafter "Boylston") in view of Foust '927. This rejection is respectfully traversed for the following reasons.

First, applicants concede that Bolyston does disclose the "concept" of and a system for regasifying or vaporizing LNG aboard a transport vessel before the gas is transferred to shore much in the same manner as that disclosed in the present application. In fact, applicants, in the "Background" set forth on pages 1-3 of the present application, fully discussed this reference and voluntarily submitted a copy of Bolyston to the PTO at the time of filing of this application. Accordingly, applicants do not question what is disclosed in Boylston and hereby agrees with the examiner's detailed assessment of this reference.

However, it is respectfully pointed out that applicants are not now claiming the system disclosed in Boylston but instead, are clearly claiming a similar but **improved system** for **safely** transporting LNG to locations which have inadequate off-loading and processing onshore facilities which applicants sincerely believe is patentably distinct over Boylston. That is, the method and system now being claimed clearly recites a system in which seawater is used as a safe, heat exchange media for the vaporizers aboard ship rather than the steam-heated, toxic glycol-water mixture used by Boylston.

As pointed out on page 3 of the present specification, the heat exchange media of Boylston requires steam which is to be supplied from the ship's boilers which, in turn, will require the boilers to remain fired while the vessel is moored for off-loading. This live steam can present a significant safety hazard to the crew if a line should break during off-loading. Further, the toxic glycol-water mixture can be dangerous to both crew and the environment if a supply line should spring a leak.

All of these factors are real and should be considered when undertaking such LNG transport operations. By using seawater, as is the case in the present invention, all of these risks are eliminated.

Foust '927 has been applied as showing a plate-type heat exchanger which uses salt water as the heat exchange media. Foust '927 does mention that his heat exchanger can be used to vaporize LNG. However, neither Boylston nor Foust '927 disclose or teach why or how a heat exchanger using seawater should or could be used aboard a transport vessel to eliminate the potential dangers presented by the shipboard system of Boylston. That is, there is nothing in Foust '927 which would suggest to one skilled in the art why he/she should use the Foust heat exchanger aboard a LNG transport. It appears that Foust's heat exchanger is designed to be used onshore at a terminal and is to be used primarily to save money; that is, Foust states that the purpose for using seawater in his vaporizer is to eliminate the "waste" due to the burning of LNG to provide the heat for evaporating the LNG (see Col. 1, lns. 38-41 of Foust). There is nothing in Foust which would even suggest that seawater should be used to eliminate risks both to the operating crew and the environment as is done in the present invention.

The examiner has stated that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the heat exchanger of Foust in place of the vaporizer of Boylston. This position is respectfully traversed in that while Mr. Boylston would appear to be a person having ordinary skill in this art (actually Mr. Boylston appears to be an expert in this art), the presently claimed, improved shipboard system did not appear obvious to him at the time (1996) he designed the system in the reference. It is respectfully pointed out that the heat exchanger of Foust '927 (issued July 7, 1981) which uses seawater was and had been available to the public for approximately 15 years when Mr. Boylston disclosed his system (i.e. one using steam-heated, glycol-water mixture as a heat exchange media aboard an LNG vessel) in the now Boylston reference (1996). It is respectfully submitted that if all of the advantages of the present invention had been recognized or was "obvious" to Mr.

Boylston, he would have undoubtedly used "sea-water heated" vaporizer instead of using his disclosed steam-glycol vaporizer.

Accordingly since neither of the applied references teach any reason for arbitrarily replacing the steam-glycol vaporizer of Boylston with the seawater-heated exchanger of Foust or how it could be done, applicants respectfully submits that the only such teaching known for doing so is that which is found only in applicants' own disclosure. Both the PTO Board of Appeals and the Court of Appeals, Federal Circuit (CAFC) have consistently held that it is improper and impermissible under the statute (i.e. 35 US 103) to use applicants' own disclosure as a blueprint to go out and find various elements or steps of an invention and then use applicants' own disclosure to combine them in just the right way to reject the applicant's claims; **In re Fritch**, 23 USPQ2d 1780 (CAFC-1992); **Orthopedic Equipment Co. v. U.S.**, 217 USPQ 193 (CAFC); **Ex parte Dussaud**, 7 USPQ2d 1818, (PTO Bd/App-1988).

Further, even if the vaporizers of the references could be inter-exchanged, the resulting system would still fail to meet the specific structure now recited in the remaining claims. That is, all of the claims, either directly or indirectly, now recite that the intake and outlet of the vaporizer are positioned a sufficient distance from each other so that the cool, discharged seawater will not be sucked up and recirculated through the vaporizer. Nothing in either of the applied references even recognizes this problem when using seawater, much less discloses the solution therefor.

In view of the above, applicant sincerely believes that remaining claims 3, and 8-11 are clearly patentably under 35 USC 103 over Boylston and Foust '927, either singly or in combination. Since all of the remaining claims in this case are sincerely believed to be allowable, it is respectfully requested that this case be reexamined and passed to issue.

Respectfully submitted,

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